

WHAT IS CLAIMED IS:

1. Method for preserving fruits, vegetables or mushrooms, comprising:
 - (a) contacting the fruits, vegetables or mushrooms with a first aqueous solution comprising a pH-adjusting agent effective to adjust the pH of the first aqueous solution to about 1.5 to 4.5, wherein the contact between the fruits, vegetables or mushrooms and the first aqueous solution is effective to reduce a microbial concentration on the fruits, vegetables or mushrooms, and
 - (b) contacting the fruits, vegetables or mushrooms with a second aqueous solution comprising a chelating agent and an antioxidant, wherein the second aqueous solution has a pH of about 7.0 to 9.0,
wherein the fruits, vegetables or mushrooms are contacted with the second aqueous solution after being contacted with the first aqueous solution.
2. Method for preserving fruits, vegetables or mushrooms according to claim 1, wherein the fruits, vegetables or mushrooms are mushrooms.
3. Method for preserving mushrooms according to claim 2, wherein the mushrooms are whole mushrooms, sliced mushrooms or mixtures thereof.

4. Method for preserving fruits, vegetables or mushrooms according to claim 1, wherein the fruits, vegetables or mushrooms are rinsed with water before contacting the fruits, vegetables or mushrooms with the first aqueous solution.

5. Method for preserving fruits, vegetables or mushrooms according to claim 5, wherein the first aqueous solution has a pH of about 2.0 to 3.0.

6. Method for preserving fruits, vegetables or mushrooms according to claim 5, wherein the first aqueous solution has a pH of about 2.2 to 2.6.

7. Method for preserving fruits, vegetables or mushrooms according to claim 1, wherein the pH-adjusting agent comprises citric acid, ascorbic acid, erythorbic acid, acetic acid, lactic acid, malic acid or mixtures thereof.

8. Method for preserving fruits, vegetables or mushrooms according to claim 7, wherein the pH-adjusting agent comprises citric acid.

9. Method for preserving fruits, vegetables or mushrooms according to claim 1, wherein the first aqueous solution comprises sodium chloride in an amount of about 0.1 to 2.0% by weight.

10. Method for preserving fruits, vegetables or mushrooms according to claim 1, wherein the first aqueous solution comprises sodium erythorbate in an amount of about 0.1 to 5.0% by weight.

11. Method for preserving fruits, vegetables or mushrooms according to claim 1, wherein the fruits, vegetables or mushrooms are contacted with the first aqueous solution for about 1 second to 5 minutes.

12. Method for preserving fruits, vegetables or mushrooms according to claim 11, wherein the fruits, vegetables or mushrooms are contacted with the first aqueous solution for about 15 to 60 seconds.

13. Method for preserving fruits, vegetables or mushrooms according to claim 12, wherein the fruits, vegetables or mushrooms are contacted with the first aqueous solution for about 30 to 45 seconds.

14. Method for preserving fruits, vegetables or mushrooms according to claim 1, wherein the fruits, vegetables or mushrooms are rinsed with water after step (a) and before step (b), and wherein the fruits, vegetables or mushrooms are rinsed with water after step (b).

15. Method for preserving fruits, vegetables or mushrooms according to claim 1, wherein the second aqueous solution comprises a high-pH adjusting agent comprising sodium bicarbonate, sodium erythorbate, sodium carbonate, sodium citrate, sodium hydroxide, sodium lactate, sodium hypophosphite, sodium acetate, potassium bicarbonate, potassium bicarbonate, potassium carbonate, potassium citrate, potassium hydroxide or mixtures thereof.

16. Method for preserving fruits, vegetables or mushrooms according to claim 15, wherein the second aqueous solution comprises sodium bicarbonate in an amount of about 0.1 to 5.0% by weight.

17. Method for preserving fruits, vegetables or mushrooms according to claim 1, wherein the antioxidant comprises sodium erythorbate, ascorbic acid or mixtures thereof.

18. Method for preserving fruits, vegetables or mushrooms according to claim 1, wherein the antioxidant is present in an amount of about 0.1 to 10.0% by weight.

19. Method for preserving fruits, vegetables or mushrooms according to claim 1, wherein the chelating agent comprises calcium-disodium EDTA, disodium EDTA or mixtures thereof.

20. Method for preserving fruits, vegetables or mushrooms according to claim 1, wherein the chelating agent is present in an amount of about 0.01 to 5.0% by weight.

21. Method for preserving fruits, vegetables or mushrooms according to claim 1, wherein the fruits, vegetables or mushrooms are contacted with the second aqueous solution for about 1 second to 5 minutes.

22. Method for preserving fruits, vegetables or mushrooms according to claim 21, wherein the fruits, vegetables or mushrooms are contacted with the second aqueous solution for about 15 to 60 seconds.

23. Method for preserving fruits, vegetables or mushrooms according to claim 22, wherein the fruits, vegetables or mushrooms are contacted with the second aqueous solution for about 30 to 45 seconds.

24. Method for preserving fruits, vegetables or mushrooms according to claim 1, wherein the second aqueous solution has a pH of about 7.5 to 8.5.

25. Method for preserving fruits, vegetables or mushrooms according to claim 24, wherein the second aqueous solution has a pH of about 7.8 to 8.2.

26. Method for preserving fruits, vegetables or mushrooms according to claim 1, further comprising:

(c) blowing air over the fruits, vegetables or mushrooms to evaporate an amount of water present on the fruits, vegetables or mushrooms, wherein step (c) is conducted after step (b).

27. Method for preserving fruits, vegetables or mushrooms according to claim 1, wherein the step (b) is effective to raise the pH at the surface of the fruits, vegetables or mushrooms to a substantially neutral pH value.

28. Method for preserving fruits, vegetables or mushrooms according to claim 1, wherein the fruits, vegetables or mushrooms are not contacted with an aqueous solution having a pH greater than 7.0 prior to the step (a).

29. Method for preserving fruits, vegetables or mushrooms, comprising:

(a) contacting the fruits, vegetables or mushrooms with a first aqueous solution comprising a pH-adjusting agent effective to adjust the pH of the first aqueous solution to about 1.5 to 4.5, wherein the contact between the fruits, vegetables or mushrooms and the first aqueous solution is effective to reduce a microbial concentration on the fruits, vegetables or mushrooms, and

(b) contacting the fruits, vegetables or mushrooms with a second aqueous solution comprising:

- (i) a chelating agent selected from the group consisting of calcium-disodium EDTA, disodium EDTA and a mixture thereof; and
- (ii) an antioxidant selected from the group consisting of sodium erythorbate, ascorbic acid and a mixture thereof,

wherein the second aqueous solution has a pH of about 7.0 to 9.0, wherein the fruits, vegetables or mushrooms are contacted with the second aqueous solution after being contacted with the first aqueous solution.

30. Method for preserving fruits, vegetables or mushrooms according to claim 29, wherein the fruits, vegetables or mushrooms are not contacted with an aqueous solution having a pH greater than 7.0 prior to the step (a).

31. Method for preserving fruits, vegetables or mushrooms according to claim 29, wherein the pH of the first aqueous solution is about 2.2 to 2.6, and the pH of the second aqueous solution is about 7.8 to 8.2.